Drinking Water Quality Report for 2005

City of Troy, Ohio www.troyohio.gov

THIS REPORT IS A REQUIREMENT OF THE SAFE DRINKING WATER ACT AMENDMENTS OF 1996. THE PURPOSE OF THE REPORT IS TO PROVIDE THE PUBLIC INFORMATION CONCERNING THE QUALITY OF DRINKING WATER DURING THE PREVIOUS CALENDAR YEAR.

The City of Troy obtains its public drinking water supplies from buried valley sand and gravel aquifers associated with the Great Miami River. The City currently utilizes nine (9) production wells to draw water from the aquifer for treatment at the water plant. These wells are located at the Miami Shores Golf Course and the Troy Municipal Park adjacent to the Great Miami River.
Well water is pumped to the water treatment plant where it is softened, clarified, disinfected and filtered, prior to being pumped to our water customers. Our water quality **meets or exceeds** all of the minimum standards that are set forth by the State of Ohio and the United States Environmental Protection Agency.
To arrange a water plant tour or obtain additional information, please contact John Shaffer, Superintendent, at the water treatment plant at 339-4826, between the hours of 7:30 a.m. to 3:30 p.m., Monday through Friday.

Issues concerning water quality may be expressed to City Council, which meets the 1st and 3rd Monday each month.

Key to Abbreviations and Terminology Used in this Repor

MRDLG = Maximum Residual Disinfectant Level Goal. The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
MRDL = Maximum Residual Disinfectant Level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.
MCL = Maximum Contaminant Level. The highest level of contamination that is allowed in drinking water.
MCLG = Maximum Contaminant Level Goal. The level of a contaminant in drinking water below which there is no known or expected risk to health.
ppm = parts per million. In some sources, ppm is referred to as "mg/L", or milligrams per liter.
ppb = parts per billion. In some sources, ppb is referred to as "ug/L", or micrograms per liter.
N/A = not applicable.
n.d. = not detectable at testing limits.
n.r. = not regulated. USEPA has not established a MCL or MCLG.
AL = Action Level. The concentration of a contaminant that triggers the public water system to install other treatment technologies to reduce the concentration of the contaminant.
Time of Travel = theoretical time, measured in years, for a drop of contaminant to enter the ground and be transported and captured by an existing drinking water supply well.

Regulated Contaminants

Substance	Highest Level Detected	Range of Detections	Highest Level Allowed (MCL)	Ideal Goals (MCLG)	Violation	Year Sampled	Sources of Substances
Fluoride	0.39 ppm	N/A	4 ppm	4 ppm	NO	2005	erosion of natural deposits
Lead	26.9 ppb*	N/A	AL = 15 ppb; 90th percentile = <5 ppb	0 ppb	NO	2004	household plumbing systems
Copper	n.d.	N/A	AL = 1300 ppb; 90th percentile = < 50 ppb	1300 ppb	NO	2004	household plumbing systems
Total Chlorine	0.92 ppm	0.77 to 0.92 ppm	MRDL = 4 ppm	MRDL = 4 ppm	NO	2005	water disinfectant
Total coliform	1	1 Detected out of 309 samples taken.	1	0	NO	2005	naturally present in the environment
Tetrachloroethene	0.8 ppb	<0.5 to 0.8 ppb	5 ppb	0	NO	2005	discharge from factories and dry cleaners
Haloacetic Acids	4.7 ppb	1.8 to 4.7 ppb	60 ppb	N/A	NO	2005	by-product of disinfection
Total trihalomethanes	19.9 ppb	16.4 to 19.9 ppb	80 ppb	0 ppb	NO	2005	by-product of disinfection

Unregulated Contaminants

Bromodichloromethane	6.7 ppb	5.5 to 6.7 ppb	n.r.	0 ppb	NO	2005	Components of Total Trihalomethanes
Bromoform	1.7 ppb	1.7 to 1.7 ppb	n.r.	0 ppb	NO	2005	
Chloroform	5.3 ppb	4.0 to 5.3 ppb	n.r.	0 ppb	NO	2005	
Dibromochloromethane	6.2	5.2 to 6.2 ppb	n.r.	60 ppb	NO	2005	

Required Health Information Statement from USEPA

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline at (800-426-4791). Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline at (800-426-4791).

Source Water Protection

The City of Troy developed and implemented a groundwater monitoring protection program in 1984. 14 monitoring wells are currently used to study groundwater quality upgradient of the aquifer area under our wells. This serves as an "early warning" tool should dangerous contaminants threaten our existing wells. In 1992, Troy developed a Wellhead Protection Program. This program served to inventory potential sources of groundwater contamination within a 5-year "time of travel" zone around our existing wells. Zoning regulations have been adopted to further reduce the risk of groundwater contamination within a 1-year time of travel zone around the wells. Public information will play a key role in providing additional risk reduction to protect this very important resource. For further information regarding our Wellhead Protection Program, please contact the Utilities Division at 339-5554.

The sources of drinking water, both tap and bottled, include rivers, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land and through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; (E) radioactive contaminants, which can be naturally-occurring, or be the result of oil and gas production and mining activities. In order to ensure tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Susceptibility Analysis Statement from Ohio EPA

The City of Troy's drinking water comes from a buried valley aquifer which provides limited protection from contaminants infiltrating into the aquifer. Because of this setting, the aquifer that supplies drinking water to the City of Troy is considered to be susceptible to contamination. The available data indicates that very low levels of tetrachloroethylene and trihalomethane have been detected periodically in the water supply. The city's water supply currently meets drinking water quality standards for all parameters analyzed. The city has developed a comprehensive wellhead protection program to manage potential sources of contamination in the protection area to minimize any impacts to the aquifer.

Unregulated Contaminant Monitoring Results

The City of Troy was required by the USEPA to monitor for 12 unregulated contaminants under the unregulated contaminant monitoring ruling. No contaminants were detected. For more information please contact John Shaffer, Superintendent at 339-4826 from 7 AM to 4 PM weekdays.

*__ONE__ (1) out of thirty-one (31) samples analyzed for lead from Troy residences in 2004 had a lead level above the detection limit. The sample in which lead was detected was drawn from a faucet that had **NOT** been used in several weeks. This gave the first-draw water a very long contact time in the lead-soldered plumbing. A repeat sample was taken from the SAME residence about a week later, and **no** lead was detected.